

UNCOVERING FOOD FRAUD ALONG THE SUPPLY CHAIN

Driven by the complexity of today's global food system, food fraud continues to thrive: **It's a global business exceeding \$10 billion dollars annually**¹. As long as there is profit to be made (and there is), everything from honey and milk to peanuts and whiskey are at risk for adulteration. Regardless of the level of safety implications or where the vulnerability occurred, suppliers are largely liable for the impact - but everyone in the food industry suffers.

What's keeping food fraud alive?

The food supply chain runs on outdated practices

Food fraud has increased by 60% over the last couple of years² due to the lack of transparency, accountability, and effective regulations. Though recently, regulators are demanding state-of-the-art practices and technology³ to help bring organizations up to standard and ultimately create a more transparent food system.

Complex supply chains create blind spots

Many companies simply lack the awareness of where and how they are susceptible to food fraud; however, with up to 10% of the food system affected by food fraud⁴, weak links can occur across raw materials, ingredients, products and packaging.

Vulnerable regulatory systems enable tampering

Current practices of storing compliance data either on paper or in centralized databases are susceptible to inaccuracies, hacking, and intentional errors motivated by corruption.

BLOCKCHAIN

FOR THE FOOD SYSTEM

A shared digital food supply chain powered by blockchain enables full transparency by digitizing transaction records and storing them in a decentralized and immutable manner, eliminating opportunity for fraud across the food chain.

END-TO-END TRACEABILITY

Increased surveillance shines a light on each link in the food chain, enabling real-time traceability of food fraud culprits - and creating accountability.

COLLABORATION

Secure data-sharing between food chain actors eliminates the possibility for participants to move fraudulent foods unknowingly.

TRANSPARENCY

Improved transparency allows fewer opportunities for fraudsters to penetrate your supply chain, and permanent records enable better management of material safety and quality standards.

IBM Food Trust creates a secure, shared, and permissioned record of transactions. This enables unprecedented visibility during each step of the food supply chain. IBM Food Trust achieves new levels of trust and transparency, making food safer and smarter from farm to fork.

APPLYING IBM FOOD TRUST **TO FOOD FRAUD**

IBM Food Trust consists of different modules designed to help participants in the food system - from producers, suppliers, manufacturers, distributors, and retailers - to make their supply chains less susceptible to fraud.

With the **Trace** module, supply chain members can transparently trace food products in the supply chain upstream and downstream, shining a light on the authenticity of both raw ingredients and packaged goods.

The **Data Entry and Access** module enables participants to securely upload, manage and access transactional data, helping detect or mitigate fraudulent action along the supply chain.

Additionally, with the **Certifications** module, users can share inspections, quality certifications, and registrations, enabling accountability for acquired data at each step.

For more information contact your IBM representative or visit ibm.com/food

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 3 https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm624867.htm

4https://fas.org/sgp/crs/misc/R43358.pdf

